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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/587,313 | 04/28/2008 | Samuel S. Murray | 38586-330002 | 4686 |
| 1923 | 7590 | 07/14/2011 | EXAMINER | |
| MCDERMOTT, WILL & EMERY LLP 600 13th Street, NW Washington, DC 20005-3096 | | | | ROMEON, DAVID S |
| ART UNIT | | PAPER NUMBER | | |
| 1647 | | | | |
| NOTIFICATION DATE | | | DELIVERY MODE | |
| 07/14/2011 | | | ELECTRONIC | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mweipdocket@mwe.com

| | | |
|---|--------------------------------------|--------------------------------------|
| Advisory Action Before the Filing of an Appeal Brief | Application No. 10/587,313 | Applicant(s) MURRAY ET AL. |
| | Examiner DAVID ROMEO | Art Unit 1647 |

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 16 June 2011 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) The period for reply expires 4 months from the mailing date of the final rejection.
- b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) They raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) They raise the issue of new matter (see NOTE below);
 - (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. Applicant's reply has overcome the following rejection(s): See Continuation Sheet.
6. Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. For purposes of appeal, the proposed amendment(s): a) will not be entered, or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: 5 and 11.

Claim(s) objected to: 23 and 41-43.

Claim(s) rejected: 1,3,4,12,13,22,25 and 38-40.

Claim(s) withdrawn from consideration: 8-10,14-21,29,32,36,37 and 44-49.

AFFIDAVIT OR OTHER EVIDENCE

8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
13. Other: _____.

/David S Romeo/
Primary Examiner, Art Unit 1647

Continuation of 5. Applicant's reply has overcome the following rejection(s): The rejection of Claims 1, 22, 25 and 43 under 35 U.S.C. 112, first paragraph, and the rejection of claim 5 under 35 U.S.C. 112, second paragraph.

Continuation of 11. does NOT place the application in condition for allowance because:

Claims 1, 3, 4, 12, 13, 25 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Keifer (U. S. Patent No. 5,620,867). Applicants' arguments have been fully considered but they are not persuasive. The rejected claims are drawn to a peptide comprising the amino acid sequence of SEQ ID NO: 1 or a peptide comprising a fragment of SEQ ID NO: 1, wherein the fragment increases the degree or rate of calcification in cells or increases the degree or rate of osteogenesis by BMP-2. Keifer's BMP comprises the amino acid sequence of SEQ ID NO: 1, as indicated in the Office action mailed 06/22/2010. Therefore, Keifer discloses a peptide comprising SEQ ID NO: 1, a peptide comprising any fragment of SEQ ID NO: 1, and a peptide comprising a fragment of SEQ ID NO: 1, wherein the fragment increases the degree or rate of calcification in cells or increases the degree or rate of osteogenesis by BMP-2. It is immaterial what Keifer calls the disclosed peptide or how Keifer characterizes the disclosed peptide because a chemical composition and its properties are inseparable. Where the claimed and prior art products are identical in structure or composition claimed properties or functions are presumed to be inherent. The claims do not require that the claimed peptide increase the rate or degree of osteogenesis or calcification. The claims only require a peptide comprising: SEQ ID NO: 1, or any fragment of SEQ ID NO: 1 that increases the rate or degree of osteogenesis or calcification. Insofar as Keifer discloses a peptide comprising the amino acid sequence of SEQ ID NO: 1, then Keifer discloses: a peptide comprising the specific 19 amino acid sequence of Spp-24 wherein the specific 19 amino acid sequence binds BMP and increases the rate of osteogenesis or calcification, and a peptide comprising any fragment of SEQ ID NO: 1 wherein the fragment increases the rate or degree of osteogenesis or calcification, binds a BMP and achieves the described functions in the specification.

The Brochmann_2010, Brochmann_2009 and Sintuu_2008 references have not been entered.

Claims 1, 3, 4, 12, 13, 22, 25 and 38-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Price (WO 96/21006). Applicants' arguments have been fully considered but they are not persuasive. The rejected claims are drawn to a peptide comprising the amino acid sequence of SEQ ID NO: 1 or a peptide comprising a fragment of SEQ ID NO: 1, wherein the fragment increases the degree or rate of calcification in cells or increases the degree or rate of osteogenesis by BMP-2. Price's peptide comprises the amino acid sequence of SEQ ID NO: 1, as indicated in the Office action mailed 06/22/2010. Therefore, Price discloses a peptide comprising SEQ ID NO: 1, a peptide comprising any fragment of SEQ ID NO: 1, and a peptide comprising any fragment of SEQ ID NO: 1 wherein the fragment increases the degree or rate of calcification in cells or increases the degree or rate of osteogenesis by BMP-2. It is immaterial how Price characterizes the disclosed peptide because a chemical composition and its properties are inseparable. Where the claimed and prior art products are identical in structure or composition claimed properties or functions are presumed to be inherent. The claims do not require that the claimed peptide increase the rate or degree of osteogenesis or calcification. The claims only require a peptide comprising: SEQ ID NO: 1 or any fragment of SEQ ID NO: 1 that increases the rate or degree of osteogenesis or calcification. Insofar as Price discloses a peptide comprising the amino acid sequence of SEQ ID NO: 1, then Price discloses: a peptide comprising the specific 19 amino acid sequence of Spp-24 wherein the specific 19 amino acid sequence binds BMP and increases the rate of osteogenesis or calcification, a peptide comprising any fragment of SEQ ID NO: 1, and a peptide comprising any fragment of SEQ ID NO: 1 wherein the fragment increases the rate or degree of osteogenesis or calcification, binds a BMP and achieves the described functions in the specification.

The Brochmann_2010, Brochmann_2009 and Sintuu_2008 references have not been entered.